OIPE JC105 JUN 04 2004 PATENT & TRADEMARK OFFICE

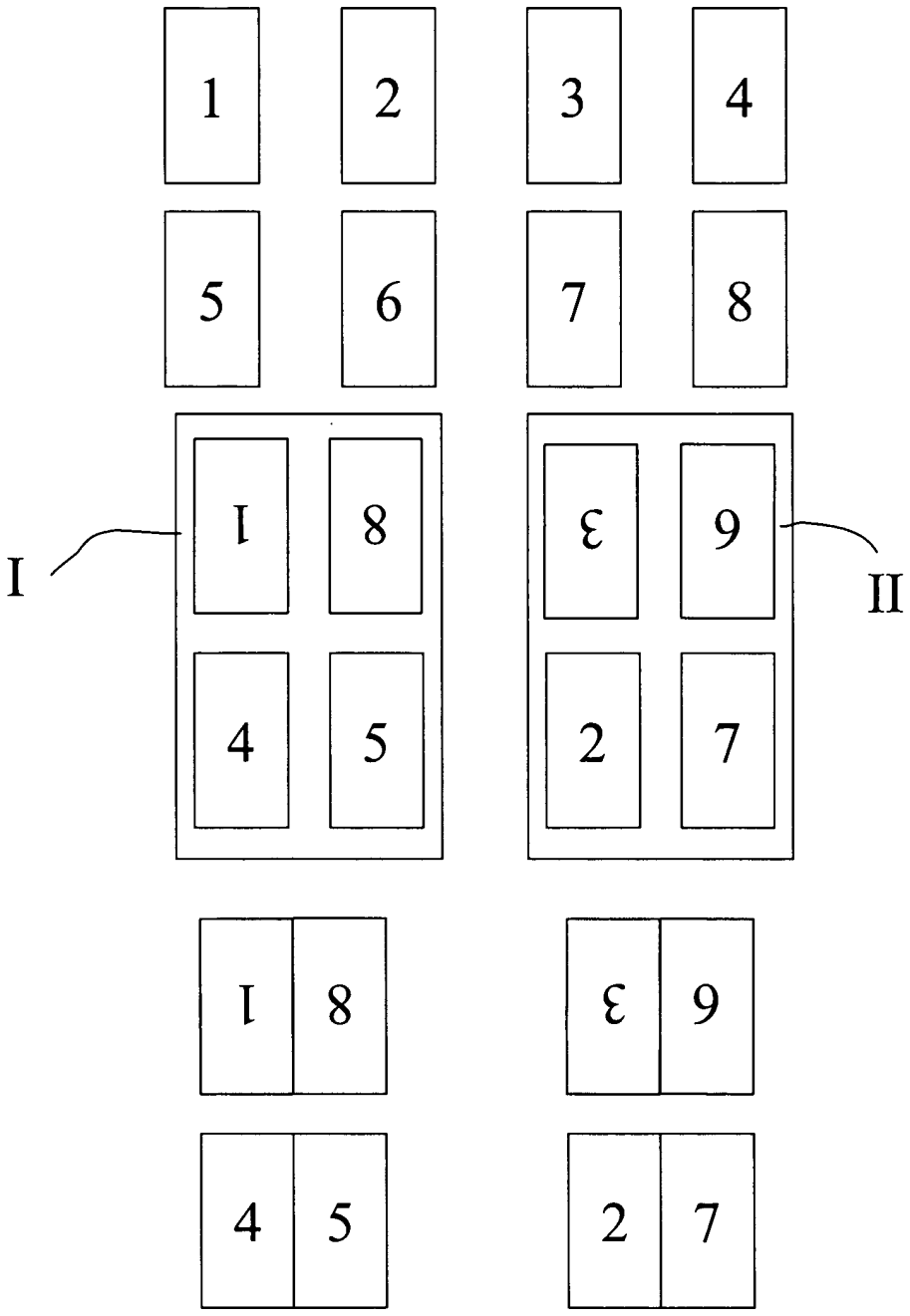

Fig. 1

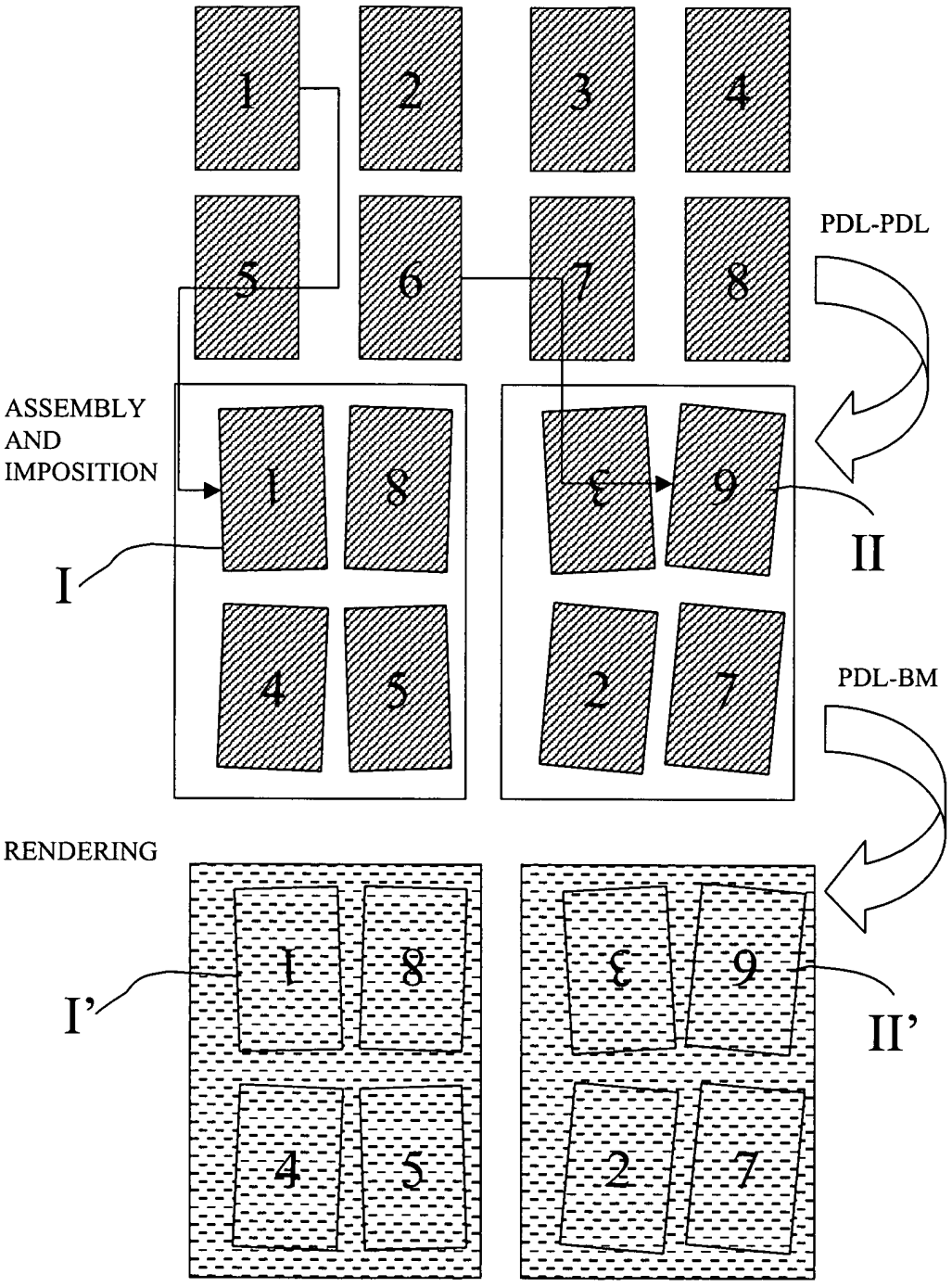

Fig. 2 PRIOR ART

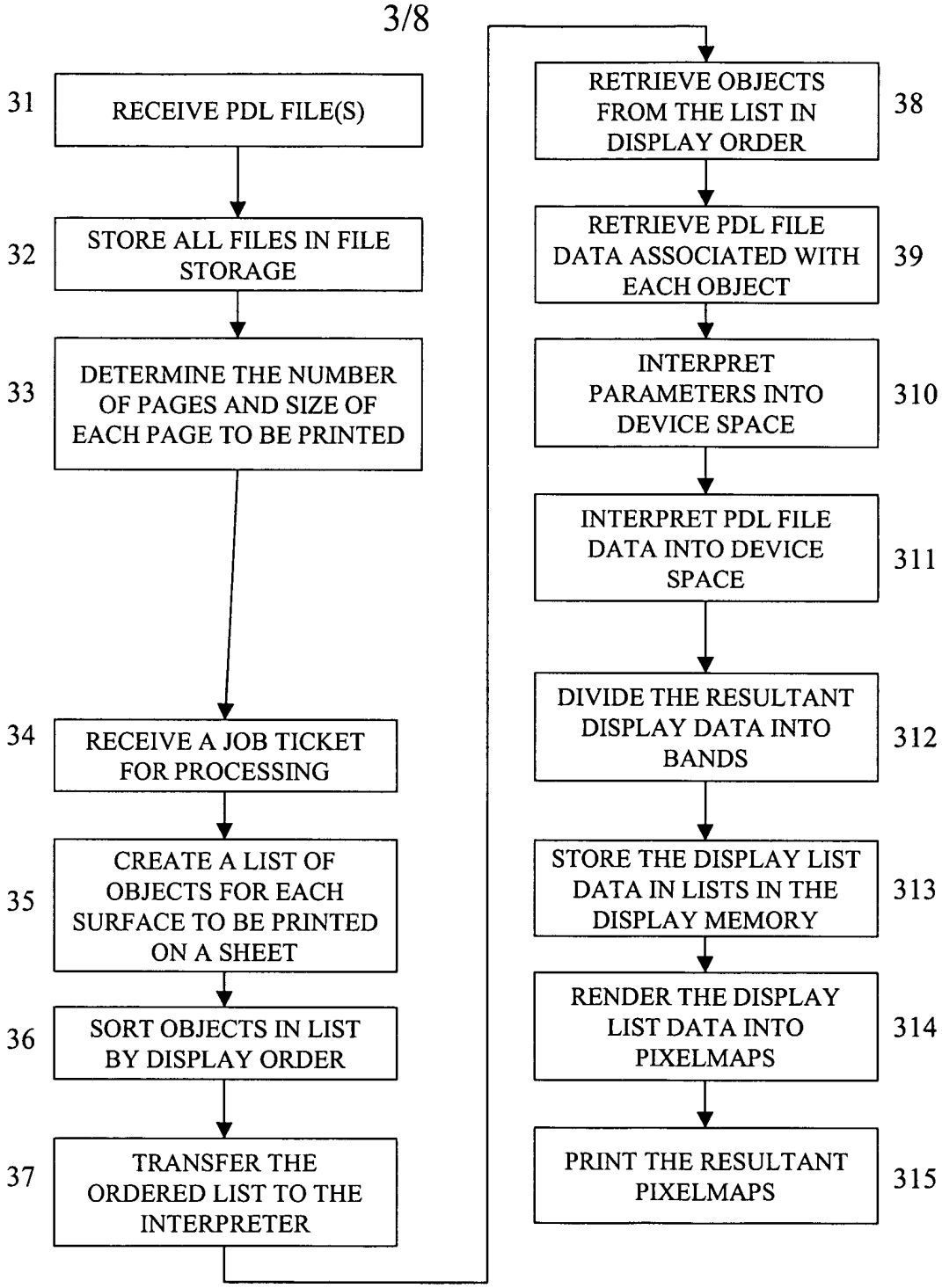
31
RECEIVE PDL FILE(S)
32
STORE ALL FILES IN FILE STORAGE
33
DETERMINE THE NUMBER OF PAGES AND SIZE OF EACH PAGE TO BE PRINTED
34
RECEIVE A JOB TICKET FOR PROCESSING
35
CREATE A LIST OF OBJECTS FOR EACH SURFACE TO BE PRINTED ON A SHEET
36
SORT OBJECTS IN LIST BY DISPLAY ORDER
37
TRANSFER THE ORDERED LIST TO THE INTERPRETER
38
RETRIEVE OBJECTS FROM THE LIST IN DISPLAY ORDER
39
RETRIEVE PDL FILE DATA ASSOCIATED WITH EACH OBJECT
310
INTERPRET PARAMETERS INTO DEVICE SPACE
311
INTERPRET PDL FILE DATA INTO DEVICE SPACE
312
DIVIDE THE RESULTANT DISPLAY DATA INTO BANDS
313
STORE THE DISPLAY LIST DATA IN LISTS IN THE DISPLAY MEMORY
314
RENDER THE DISPLAY LIST DATA INTO PIXELMAPS
315
PRINT THE RESULTANT PIXELMAPS

Fig. 3 PRIOR ART

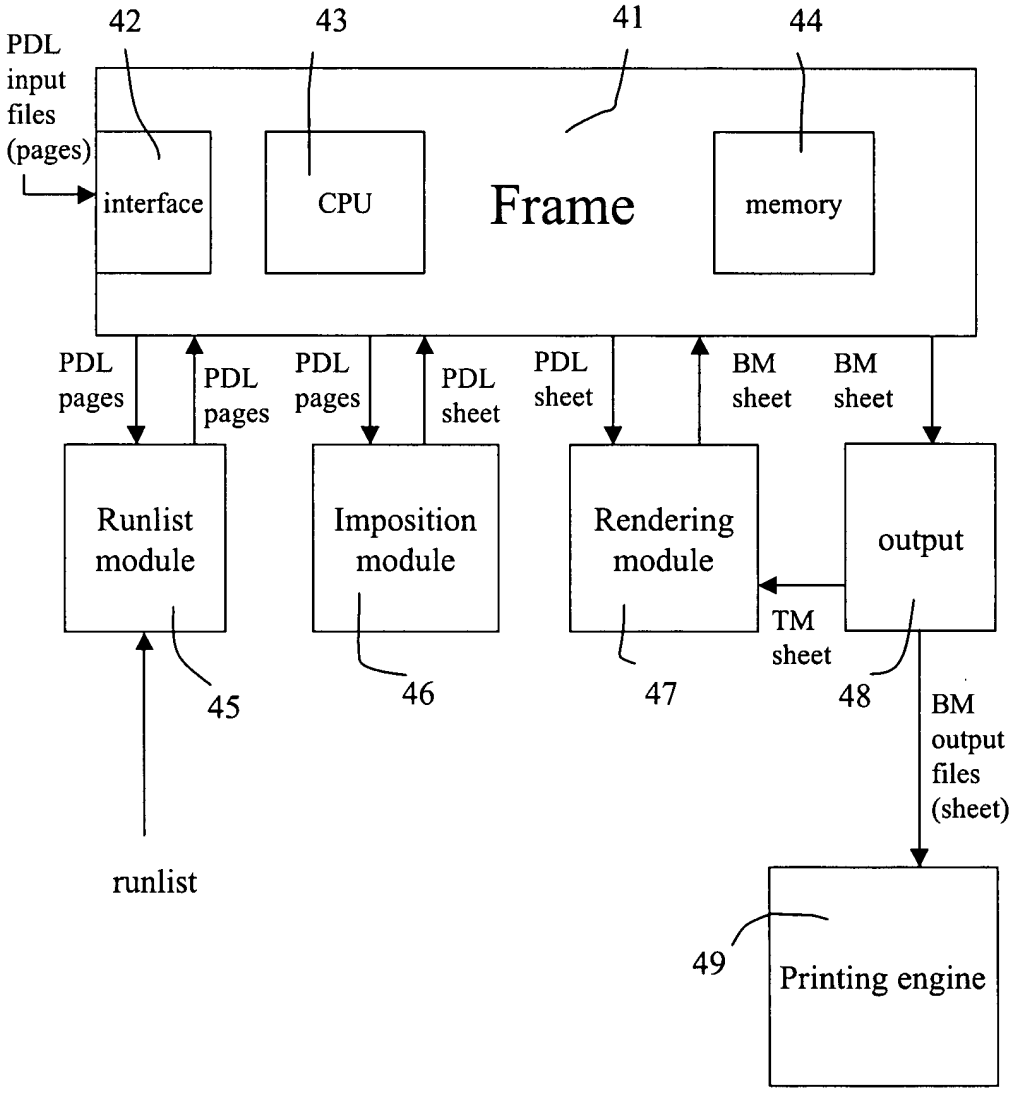

Fig. 4 PRIOR ART

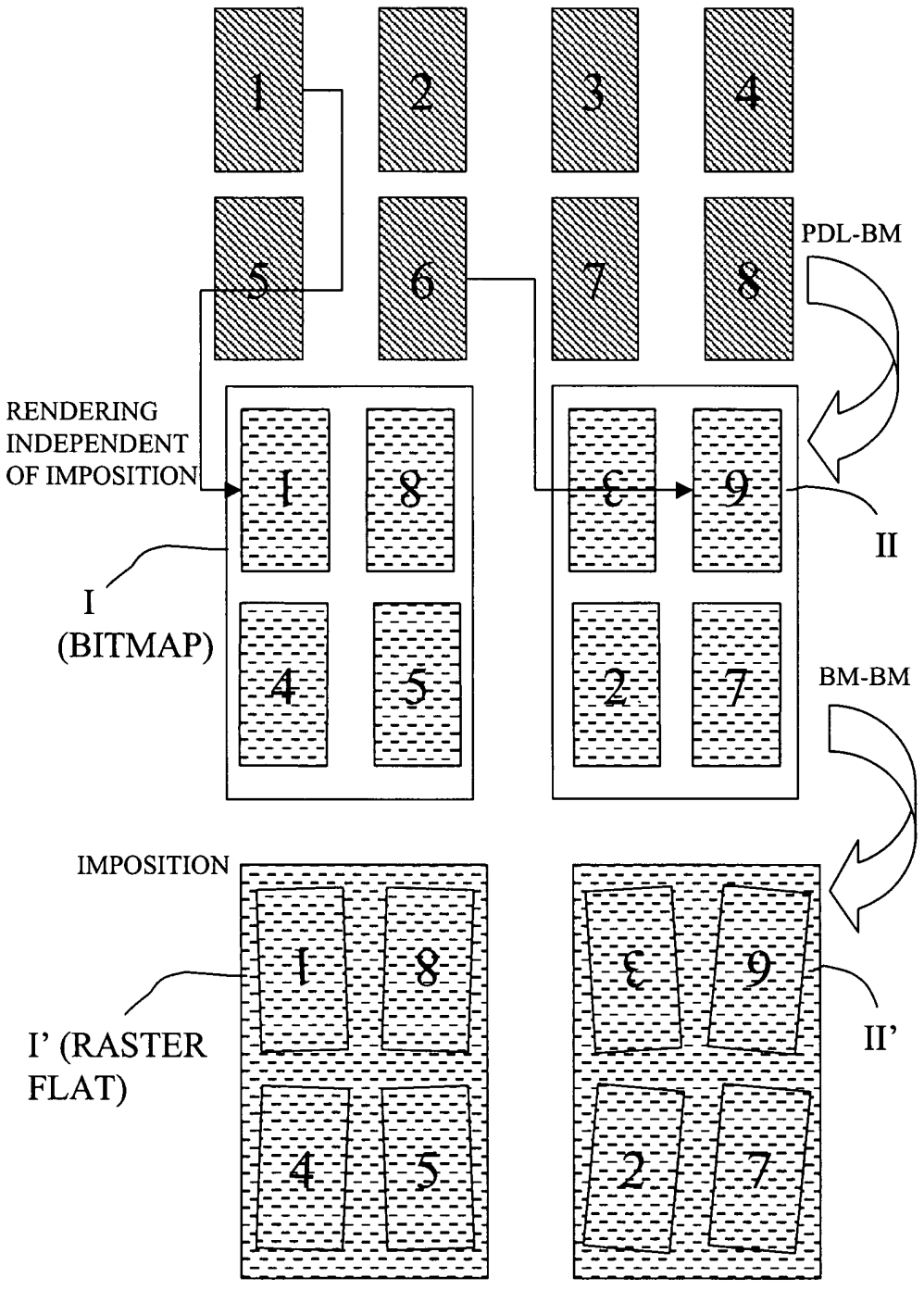

Fig. 5 PRIOR ART

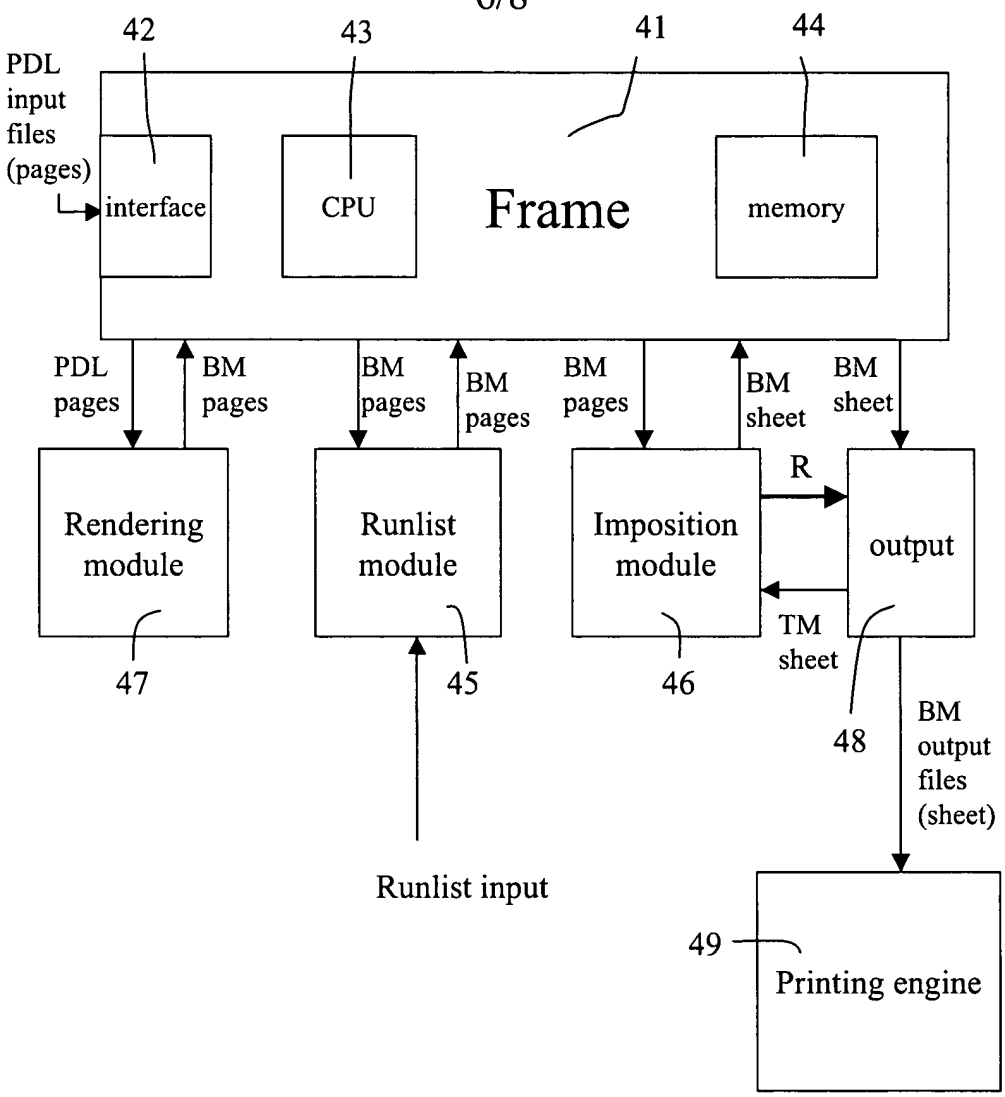

Fig. 6 PRIOR ART

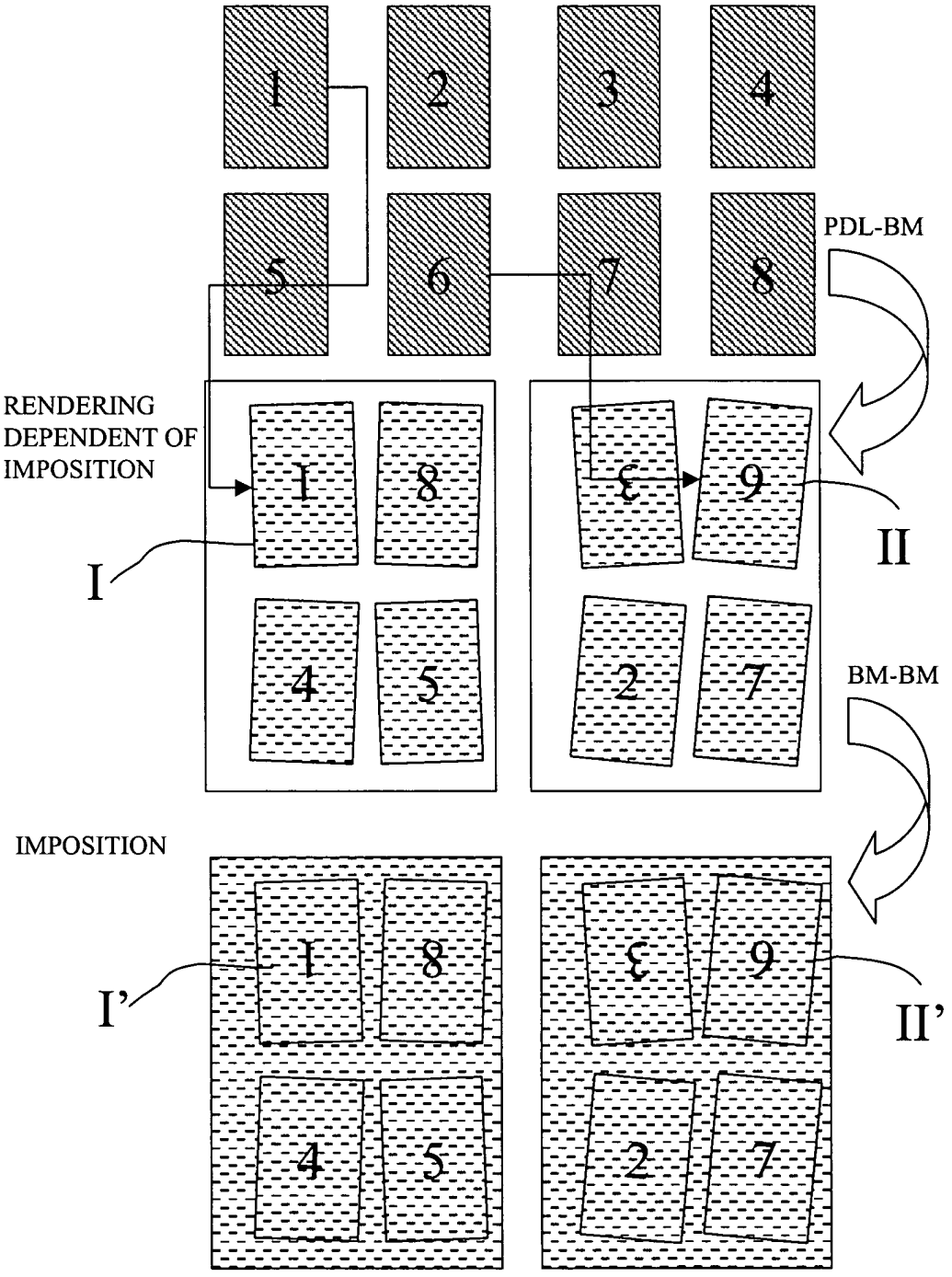
1
2
3
4
5
6
7
8
PDL-BM
RENDERING
DEPENDENT OF
IMPOSITION
I
8
9
II
4
5
2
7
BM-BM
IMPOSITION
I'
8
9
II'
4
5
2
7

Fig. 7

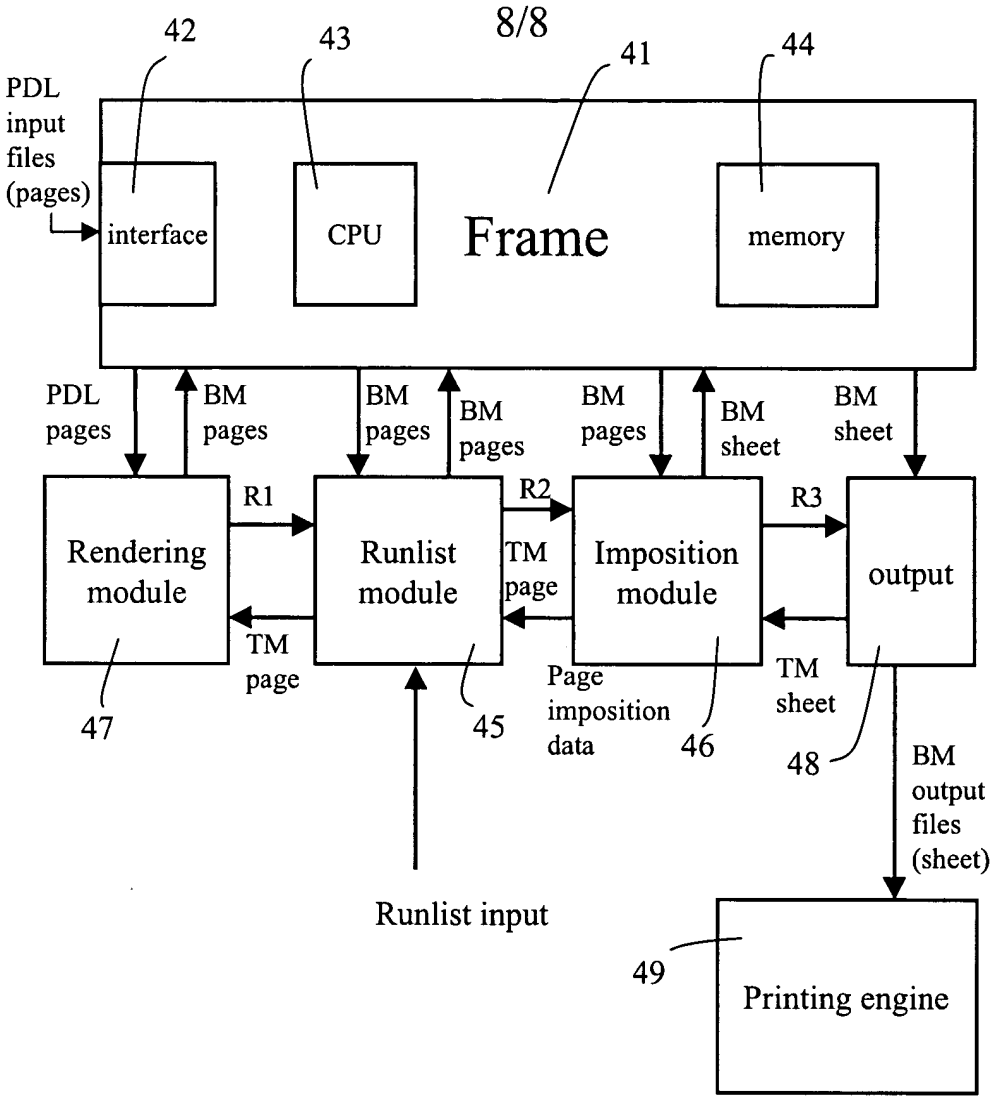
42
43
41
44
PDL
input
files
(pages)
interface
CPU
Frame
memory
PDL
pages
BM
pages
BM
pages
BM
pages
BM
pages
BM
sheet
BM
sheet
R1
R2
R3
Rendering
module
Runlist
module
TM
page
Imposition
module
output
TM
page
Page
imposition
data
TM
sheet
47
45
46
48
BM
output
files
(sheet)
Runlist input
49
Printing engine

Fig. 8